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29153	7590	08/22/2006	EXAMINER	
ATI TECHNOLOGIES, INC. C/O VEDDER PRICE KAUFMAN & KAMMHOLZ, P.C. 222 N.LASALLE STREET CHICAGO, IL 60601			RAHMAN, FAHMIDA	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/676,512	BIRMINGHAM, BLAIR	
	Examiner	Art Unit	
	Fahmida Rahman	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This final action is in response to communications filed on 6/13/2006.
2. Claims 1, 2, 8-10, 16-17, 21-22, 24 have been amended, claim 11 has been canceled, no new claims have been added. Thus, 1-10, 12-24 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kammer et al (US Patent No. 6943667).

For claim 16, Kammer et al teach the following limitations:

A method for remote connecting comprising

receiving a power supply to power a remote connector (lines 45-47 of column 8 mentions that transceiver circuit is awake when receiving device is in sleep mode. That requires powering 310 through a power supply, wherein 310 is the remote connector that connects two remote devices)

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providing, by the remote connector, at least one input port (320) capable of receiving a peripheral connector (210 is a peripheral connector, since it can connect to many peripheral devices in the system, such as 105, 106. Thus, 320 is capable of receiving the connector 210);

wirelessly receiving a wireless command (401) from a remote device

generating a wake-up command in response to the wireless command (lines 14-27 of column 8)

and transmitting the wake-up command to a processing system (lines 18-20 of column 8)

For claim 17, note Fig 5, Fig 6.

For claim 18, wireless command is received from a remote device. The command is a connection request, which can be considered as a wakeup request as it is enabling the waking up of the system.

For claim 19, the port is a USB port.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, in view of Kammer et al (US Patent No. 6943667).

For claim 1, Applicant's admission of prior art teaches the following limitations:

A remote connector comprising:

a plurality of input ports (lines 1-2 of [0003] of page 1 of applicant's specification mention that the remote connector having plurality of input ports is a solution to the growth in the number of peripheral components. Thus, remote connector with plurality of input ports exists in prior art);

a power supply input receiver operably coupleable to a power source and being capable of receiving a power supply for powering the remote connector (lines 1-7 of [0005] of page 2 of applicant's specification mention that the remote connectors can be powered using two different types of power sources. Thus, the remote connector receives input power from a power source for powering the remote connector);

a wireless receiver capable of wirelessly receiving a wireless command (lines 4-9 of [0008] of page 3 of applicant's specification mention that RF receiver provides an input to the computing system via a USB port. Thus, the remote connector is capable of receiving a wireless command);

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The applicant's admission of prior art does not teach the following limitations:

- **and a transmitter capable of generating a wake-up command in response to the wireless command and capable of providing the wake-up command through an input/output interface to a processing unit operably coupleable to the remote connector.**

Kammer et al teach the following limitations:

A remote connector (310 remotely connects first wireless device with second wireless device and can be considered as a remote connector) comprising:

wireless receiver (330) capable of wirelessly receiving a wireless command (306); and a transmitter (330) capable of generating a wake-up command (signal on 240) in response to the wireless command (306) and capable of providing the wake-up command through an input/output interface (240 is an interface to 210) to a processing unit (220) operably coupleable to the remote connector (220 is coupled to 310)

It would have been obvious for an ordinary skill in the art at the time the invention was made to combine the teachings of applicant's admission of prior art and Kammer et al. One ordinary skill in the art would have been motivated to incorporate the teachings of Kammer et al into applicant's admission of prior art, since that would allow the computer systems to receive messages while the receiving device is in a sleep mode (lines 63-67 of column 1).

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For claim 2, 240 is the output bus.

For claim 3, note 520, 532.

For claim 4, 401 is received through an antenna 405.

For claim 5, the transmission is a radio transmission (lines 49 of column 5).

For claim 6, [0004] of page 2 of applicant's admission of prior art mentions that the remote connector is a USB hub that consists of multiple USB input ports coupled to a central internal bus.

For claims 7 and 8, wireless command is received from a remote device. The command is a connection request, which can be considered as a wakeup request as it is enabling the waking up of the system.

For claim 20, output bus 240 in Krammer is not a USB bus. However, 280 is a USB bus that is used to communicate data to the processing unit. One ordinary skill in the art would have been motivated to use the USB bus 280 to communicate wakeup signal (i.e., signal on 240) to the processing unit in order to have fewer lines and control (i.e., uniting 240 and 280 would result in a simpler design) between transmitter and processing unit.

For claim 21, Applicant's admission of prior art teaches the following limitations:

A remote connector comprising:

a plurality of input ports (lines 1-2 of [0003] of page 1 of applicant's specification mention that the remote connector having plurality of input ports is a solution to the

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growth in the number of peripheral components. Thus, remote connector with plurality of input ports exists in prior art);

a power supply input receiver operably coupleable to a power source and being capable of receiving a power supply for powering the remote connector (lines 1-7 of [0005] of page 2 of applicant's specification mention that the remote connectors can be powered using two different types of power sources. Thus, the remote connector receives input power from a power source for powering the remote connector);

a wireless receiver capable of wirelessly receiving a wireless command (lines 4-9 of [0008] of page 3 of applicant's specification mention that RF receiver provides an input to the computing system via a USB port. Thus, the remote connector is capable of receiving a wireless command);

The applicant's admission of prior art does not teach the following limitations:

- **and a transmitter capable of generating a wake-up command in response to the wireless command through an input/output interface.**

Krammer et al teach the following limitations:

A remote connector (310) comprising

a RF receiver (330 is a RF receiver as lines 47-49 of column 5 mentions that 250 is a radio) capable of wirelessly receiving a wireless command (306) transmitted using

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a radio frequency transmission (as 250 is a radio, the transmission should be radio frequency transmission), **wherein the wireless command includes a wake-up request** ("connection request" as mentioned in lines 45-47 of column 8);

and a transmitter (330) capable of generating a wake-up command (IRQ) in response to the wireless command;

an output bus (240) capable of operably coupled to a processing unit (220), such that the wake-up command may be provided to the processing unit through the output bus (240 carries wakeup)

and a suspend mode detector capable of receiving a suspend mode indicator from the processing unit such that the transmitter can determine if the wake-up command needs to be generated (520, 531).

It would have been obvious for an ordinary skill in the art at the time the invention was made to combine the teachings of applicant's admission of prior art and Kammer et al. One ordinary skill in the art would have been motivated to incorporate the teachings of Kammer et al into applicant's admission of prior art, since that would allow the computer systems to receive messages while the receiving device is in a sleep mode (lines 63-67 of column 1).

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For claim 22, [0004] of page 2 of applicant's admission of prior art mentions that the remote connector is a USB hub that consists of multiple USB input ports coupled to a central internal bus.

For claim 23, the remote host computer sends the wireless command.

5. Claims 10, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission of prior art, in view of Wang et al (UK Patent Application Publication 0117150.3)

For claim 10, Applicant's admission of prior art teaches the following limitations:

A remote connector comprising:

a plurality of input ports (lines 1-2 of [0003] of page 1 of applicant's specification mention that the remote connector having plurality of input ports is a solution to the growth in the number of peripheral components. Thus, remote connector with plurality of input ports exists in prior art);

a power supply input receiver operably coupleable to a power source and being capable of receiving a power supply for powering the remote connector (lines 1-7 of [0005] of page 2 of applicant's specification mention that the remote connectors can be powered using two different types of power sources. Thus, the remote connector receives input power from a power source for powering the remote connector);

a wireless receiver capable of wirelessly receiving a wireless command (lines 4-9 of [0008] of page 3 of applicant's specification mention that RF receiver provides an input to the computing system via a USB port. Thus, the remote connector is capable of receiving a wireless command);

The applicant's admission of prior art does not teach the following limitations:

- **and a transmitter capable of generating a wake-up command in response to the wireless command through an input/output interface.**

Wang et al teach the following limitations:

A remote connector comprising (lines 4-6 of page 2 mention that the method of remote start of wireless transmission USB is provided by means of establishing a sensor between the USB wireless perimeter and the computer host. Thus, the system connects host with USB wireless perimeter. Therefore, the USB wireless perimeter comprises a remote connector to connect the perimeter with computer host remotely. The remote connector comprises the combination of 11 and 12);

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a power supply input receiver (11) operably coupleable to a power source (WATCH DOG TIME OUT in lines 4-7 of page 7) and being capable of receiving a power supply for powering the remote connector (lines 4-7 of page 7 mention that the WATCH DOG TIME OUT provides power to the sensor. Thus, the sensor is receiving power from WATCH DOG TIME OUT for detecting the signal. Therefore, the sensor receives power from power supply for powering the remote connector)

wireless receiver (11) capable of wirelessly receiving a wireless command (lines 8-9 of page 6 mention that the sensor detects signals in the receiver. Therefore sensor receives the signal. As sensor is a part of wireless USB peripheral, the signal is received wirelessly);

and a transmitter capable of generating a wake-up command in response to the wireless command (lines 1-6 of page 3 and lines 18-20 of page 6 mention that the REMOTE WAKEUP is carried out by sensor and microprocessor. Therefore, combination sensor and microprocessor generates wakeup command).

an input/output port capable of operably coupling the remote connector to a processing unit (10), such that the wakeup command may be provided to the processing unit (lines 15-21 of page 3 mention that the remote start suggest that the RF module in the wireless perimeter is to enter into wake up function. That is, the

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sensor and microprocessor is to send the wireless command necessary for REMOTE WAKEUP to the processing unit, which is described here as RF module)

a remote device capable of generating the wireless command and providing the wireless command to the remote connector (lines 6-7 of page 6 of Wang et al mention that the host sends signal to wireless USB peripheral)

It would have been obvious for an ordinary skill in the art at the time the invention was made to combine the teachings of applicant's admission of prior art and Wang et al. One ordinary skill in the art would have been motivated to incorporate the teachings of Wang et al into applicant's admission of prior art, since that would allow the suspend and wake-up of wireless perimeter efficiently. The remote control of wireless perimeter's wakeup of can take significant time and energy if not done properly (lines 14-18 of page 1 and lines 1-3 of page 2 of Wang et al).

For claim 12, [0004] of page 2 of applicant's admission of prior art mentions that the remote connector is a USB hub that consists of multiple USB input ports coupled to a central internal bus.

For claim 13, lines 16-19 of page 3 of Wang et al mention that the receiver comprises RF module. Since the receiver comprises RF module, the transmitter must be able to produce RF signal.

For claim 14, the wireless command of Wang et al is a wake-up request.

For claim 15, lines 18-20 of page 6 of Wang et al mention that the computer system proceeds with REMOTE WAKE UP to wake up the wireless USB peripheral device. The wake up signal needs to be processed by a processing unit. Since the peripheral device is USB peripheral, it is coupled to USB bus of the host computer through an I/O interface. The processing unit of the host computer must recognize the wake-up of peripheral USB through USB bus.

In addition, the USB peripheral device of Wang et al is suspended when operation is not required. Thus, there must be a suspend mode detector in the USB peripheral capable of receiving a suspend mode indicator from the processing unit. The wake-up command is generated when suspend mode is to be terminated. Thus, the transmitter needs to know if the USB peripheral is currently in suspended mode.

6. Claims 9 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, in view of Kammer et al (US Patent No. 6943667), further in view of Mano et al (US Patent Application Publication 2002/0057892)

For claims 9 and 24, AAPA teaches that the command is a media display command. However it does not teach that the command is a play command. Mano et al teach that

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the wireless command can be a rewind command ([0018]). One ordinary skill in the art would have been motivated to incorporate the rewind command as such commands are useful in VCR applications.

Response to Arguments

Applicant's arguments with respect to claim 1-9, 16-24 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 10, 12-15 have been fully considered but they are not persuasive.

Applicant argues that Wang does not teach or suggests an input/output port capable of operably coupling the remote connector to a processing unit, such that the wakeup command may be provided to the processing unit.

Examiner disagrees. The processing unit resides within 10, which needs to be waked up by the transmitter (i.e., 11 and 12). It is not possible to perform a remote wakeup without a signal from sensor, since sensor's role is an integral part of REMOTE WAKE-UP. Therefore, sensors and microprocessor have to generate an indication that the system can perform a WAKE-UP. This indication has to be through a signal, as the system is an electronic system. Therefore, the remote connector 11 and 12 provides

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the wake-up command to the processing unit of 10, which is coupled through a port as shown in Fig 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fahmida Rahman
Examiner
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